



Impacts of COVID-19 on wood value chains and forest sector response: Results from a global survey 2020

SUMMARY

This policy brief summarizes the findings from a global survey on the impacts of the coronavirus (COVID-19) outbreak on wood value chains and recovery measures from the forest sector. The survey received responses from 237 stakeholders registered in the Sustainable Wood for a Sustainable World (SW4SW) network,¹ representing all segments of wood value chains. The survey was administered for two weeks (3–15 June 2020) and the results presented here cover impacts during the reference period of February to June 2020. Based on the survey results, initial policy recommendations are formulated for current challenges and future perspectives involving wood value chains in the post-COVID-19 environment.

KEY MESSAGES

The takeaway key messages from the survey findings are:

- **Layoff of workers, temporary closure of commercial outlets or temporary reduction of salaries were reported as the hardest impacts of the COVID-19 pandemic across all segments of wood value chains.** Silvicultural activities, logging and trading have been particularly impacted by a more permanent layoff of workers, whereas respondents from the pulp and paper sector and advisory services indicated positive impacts on their businesses.
- **Survey respondents had a positive outlook regarding longer-term efforts to increase the generation of socio-economic and environmental benefits from forests in response to the COVID-19 pandemic.** However, responses also showed concern about the possibility of a significant decrease in the financial resources to implement sustainable forest management (SFM).
- **COVID-19 has brought additional risks to forest governance.** Respondents point to monitoring and enforcement, informality, conditions to engage with and maintain certification, illegality and tenure rights as the governance issues more severely aggravated by the pandemic.
- **Remote working was the most common strategy adopted by the private forest sector to face the immediate impacts of the pandemic.** At the same time, **COVID-19 may have improved health standards along wood value chains,** as monitoring and compliance with

¹ SW4SW is a joint initiative of the Collaborative Partnership on Forests (CPF), formed by the Center for International Forestry Research (CIFOR), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, Food and Agriculture Organization of the United Nations (FAO), International Tropical Timber Organization (ITTO), World Bank, World Wildlife Fund (WWF).



health and safety guidelines from competent national authorities was the third highest-ranked measure adopted by the private sector to face the immediate impacts of the pandemic.

- **Moving forward, respondents from all segments of wood value chains indicated the adoption of digital technologies as the most relevant measure in a medium- to long-term recovery strategy.** Increased resource efficiency, inclusion of workers in social protection and decent employment schemes, health care facilities, labour-saving innovations and industrial certification are other measures highlighted for adoption in the recovery phase.
- **Logging and solid wood businesses in particular indicated quality standards and social measures, as well as efficiency, as the most relevant measures to promote recovery in the medium to long term.**
- **Governments are expected to support forest livelihoods by leading awareness and information campaigns on the risks of COVID-19 and measures to safely continue operations and to minimize losses.** Financial support to small and medium forest enterprises (SMFEs) through grants and cash transfer were also stressed as important government-led measures.
- **The COVID-19 crisis presents an opportunity to position forestry more forcefully as a sector that can effectively address poverty, generate income and employment and enhance resilience to shocks in rural areas.** The integration of smallholders, communities, and (SMFEs) in sustainable supply chains is considered the most effective approach. The generation of employment through investment in forest restoration comes in as the second most effective approach.

CONTEXT

The coronavirus (COVID-19) pandemic has significantly impacted peoples' lives and the global economy. The severity of impacts has revealed itself in loss of life, employment and incomes, shocks to the global economy and increasing pressures on nature, among other factors. To counter the short- and long-term shocks of the pandemic, the international community has been actively providing information on various aspects of forestry, highlighting the impacts experienced by the sector and the role of legal and sustainable forest products and nature-based solutions to overcome the effects of the crisis ([RECOFT, 2020](#); [CTI, 2020](#); [FAO, 2020a](#); [FAO, 2020b](#) and [ITTO, 2020](#)).

The Sustainable Wood for a Sustainable World – a joint initiative of the Collaborative Partnership on Forests (CPF) – conducted a global online survey to gather further information on the precise challenges that wood value chains are experiencing and the response measures considered by the sector. The survey focused on:

- how the different segments of wood value chains were experiencing the COVID-19 pandemic;
- what the most relevant response measures for wood value chains were; and
- what significant contributions wood value chains can make to “build back better”.

This brief presents the results of the survey and provides some policy recommendations based on the findings. It should help to strengthen the evidence base on which countries will build policies and programmes dealing with the crisis and its effects for a more resilient and sustainable future.

RESULTS

Participation in the survey

The survey target respondents were representative of all stakeholders in wood value chains. The SW4SW initiative's database of participants in events since 2017 served as a pool of respondents. The database contains 669 entries from 111 countries representing local, regional and national institutions from the public and private sectors, as well as non-governmental and international organizations. To avoid respondent "survey fatigue", the current incumbents of Head of Forestry positions in national governments who are part of the SW4SW database were not included, and instead received the FAO short survey Building back better: COVID-19 pandemic recovery contributions from the forest sector (see below)

Box. Heads of forestry survey on COVID-19

In parallel to the SW4SW survey, FAO undertook a short survey among heads of forestry in national governments in preparation for the virtual event Heads of Forestry Dialogue: COVID-19 impacts – main issues, response needs and opportunities to "build back better", held on 22 June 2020 as part of the COVID-19 Forestry Webinar Week organized by FAO (22–25 June 2020). The global dialogue discussed the COVID-19 pandemic recovery contributions from the forest sector, how to better coordinate responses, and provided for the exchange of experiences and lessons among countries and regions.

The survey was conducted in three languages (English, French, Spanish) and received responses from the Heads of Forestry of 30 countries. Respondents reported that the focus of work on forest sector aspects changed remarkably with COVID-19 (average number of 58 from the scale not at all (0) – very much (100)), and 60 percent replied that their organization was developing a pandemic response plan related to the forest sector. The most frequent response measures reported to have been already undertaken or agreed were awareness/information campaigns on the risks of COVID-19 and measures to continue operations.

The summary report of the webinar with full survey results can be accessed at:

http://www.fao.org/fileadmin/user_upload/idf/COFO25/COVID_Forestry_Webinar_Week_Chairs_summary_df-clean.pdf

A total of 237 responses were received from all global regions, of which 152 were complete responses (64 percent). Africa had the highest participation in the survey, although responses were received from almost all regions. The majority of respondents were private sector (24 percent), which if added to forest and farm producer organizations (FFPOs) (7 percent) constitute the largest group of respondents, followed by governments (23 percent) and academia (20 percent). It is important to highlight that very few responses were received from financial organizations (two), therefore the results for this stakeholder group should be interpreted with care.

Among private sector and FFPO respondents, almost all wood value chain segments were well represented, except for financial services, logistics and woodfuel/charcoal, which were not represented in the survey (Figure 1). About 50 percent of responses were from small businesses (under 50 employees), followed by large businesses (26 percent), see Figure 2.

FIGURE 1 | Percentage participation of private sector and FFPOs, by forest subsector

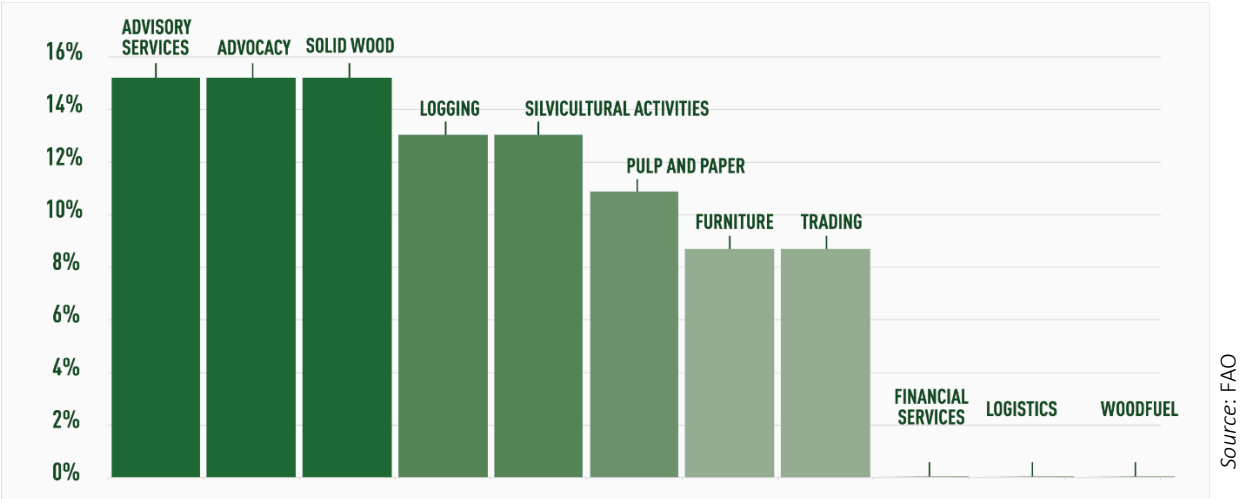
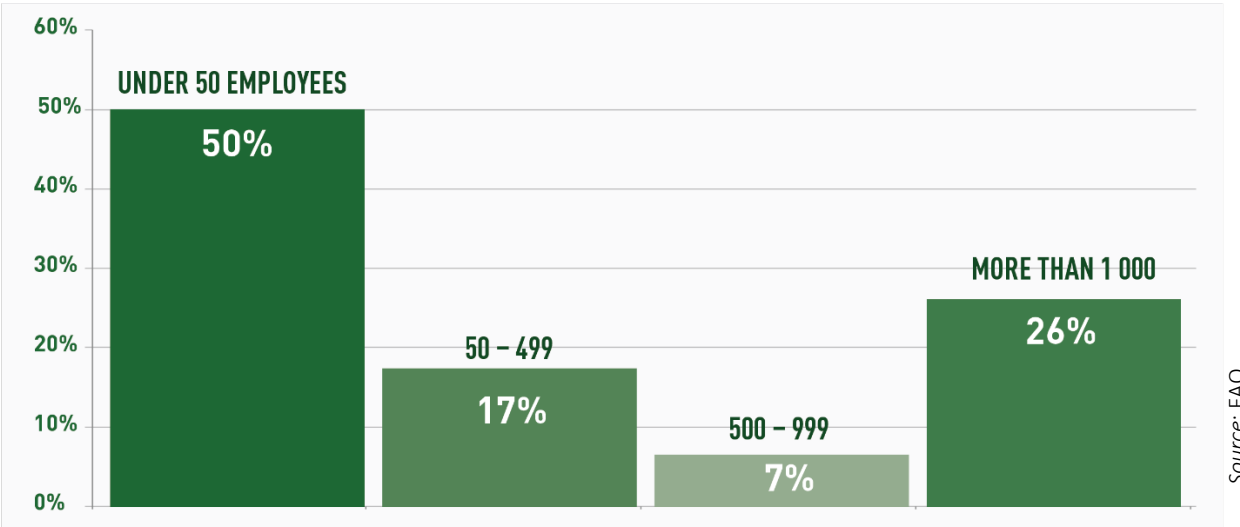


FIGURE 2 | Percentage participation of private sector and FFPOs, by business size

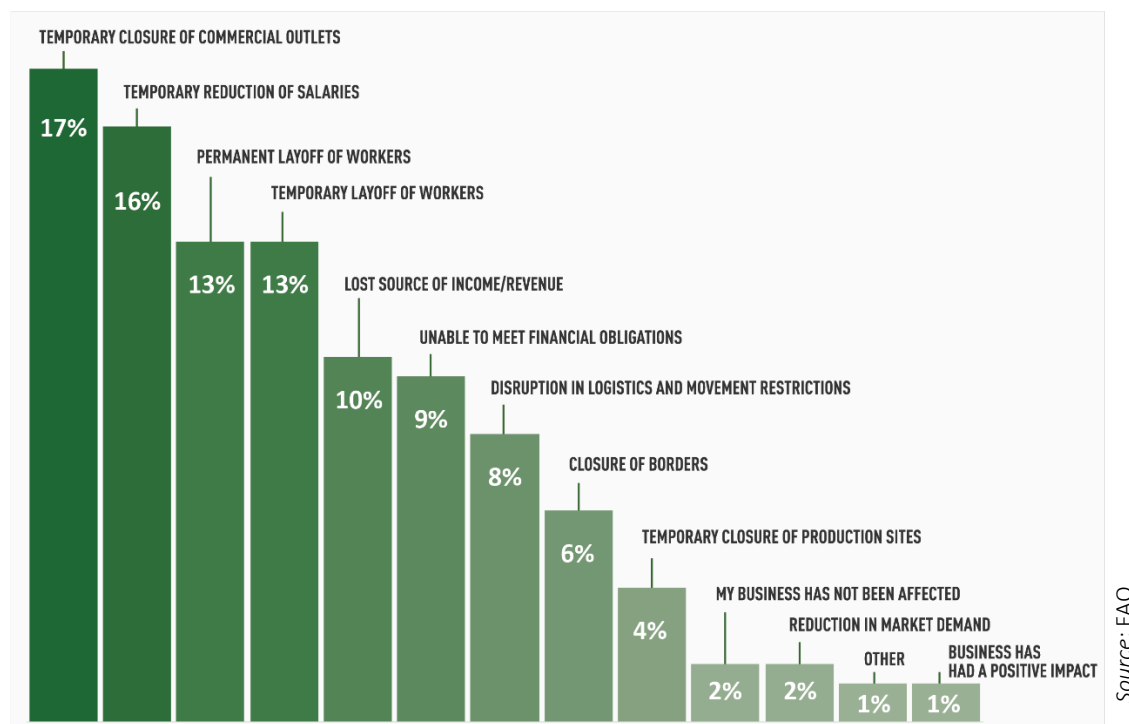


Significant impacts on wood value chain businesses

The survey has captured the first reactions after the emergence of the pandemic. Responses were provided amidst great uncertainty and in reaction to the most immediate impacts.

A total of 46 private sector and FFPO participants answered the question on the most significant impacts. In general, 68 percent of respondents were very concerned (45 percent) or extremely concerned (23 percent) about COVID-19 impacts on wood value chains. Few of the respondents (3 percent) indicated that they were not at all concerned. Figure 3 presents the percentage of significant impacts on wood value chain businesses.

FIGURE 3 | Percentage of significant impacts on wood value chain businesses, reported by private sector and FFPOs



The distribution of impacts experienced by businesses was slightly different across forest subsectors. Silvicultural activities, logging and trading have been particularly impacted by the permanent layoff of workers. Respondents from the pulp and paper sector indicated positive impacts on their businesses (40 percent), such as an increase in sales, or even no issues at all (30 percent). Advisory services also reported positive impacts. The results point to activities that might have been immediately disrupted due to physical restrictions such as physical distancing and movement control, generating permanent or temporary layoff of workers. The positive impacts are reported by businesses which might have seen an increase in demand due to the need to review business strategies and planning, as well as changes in household consumption as families were staying at home longer.

The perceptions of other wood value chain actors of the impacts of the pandemic on businesses were aligned with the issues already experienced and reported by the private sector and FFPOs. However, those not directly involved in businesses could not anticipate that most of the pulp and paper business respondents would not report any disruption as an immediate effect of the pandemic. Such a result might be related to the larger size and more robust capital structure of the pulp and paper industry, as well as a possible increase in demand for its products directed at households.

Impacts on forest-related goals

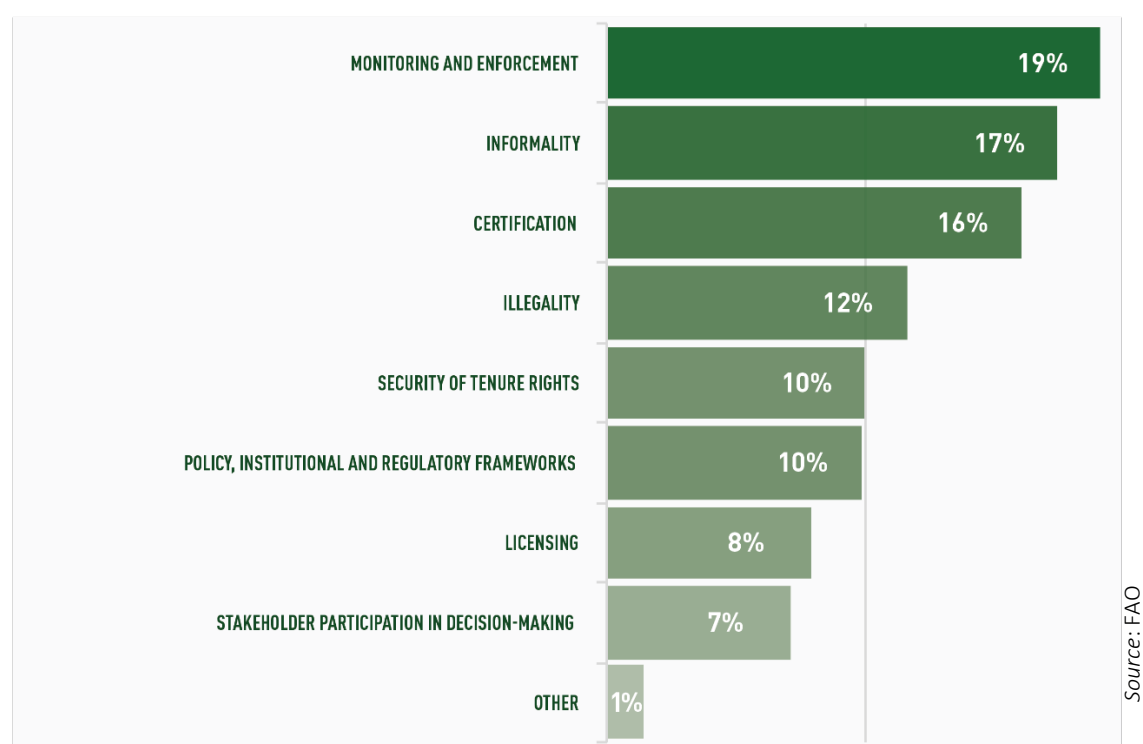
From the set of common questions to all respondents about impacts on forest-related goals, some 66 percent of the respondents (out of a total of 152 responses) thought that the COVID-19 outbreak would reduce the mobilization of significant financial resources to implement SFM. Respondents commented that funding to implement SFM may have received less attention during the immediate response to COVID-19 in many countries/regions in order to prioritize the health crisis. On the other hand, respondents' perceptions indicated a more positive trend towards the generation of forest socio-economic and environmental benefits (43 percent), as

well as cooperation and coordination on forest-related issues (41 percent). Respondents also believed that some efforts will be less affected by the pandemic, such as significantly increasing the area of protected forests worldwide.

Impacts on forest governance

According to the perception of the respondents, the economic impacts of the pandemic may weaken efforts to improve forest governance. A total of 152 participants provided their perceptions of the governance issues most aggravated by the pandemic, see Figure 4. Initial measures such as physical distancing, movement restriction and closure of market outlets seem to have had an immediate impact on governance. Issues with certification can be related to disruptions to audit activities due to public health measures and travel restrictions in response to the COVID-19 pandemic.

FIGURE 4 | Percentage perceptions of governance issues aggravated by the pandemic



Although the perception pattern does not vary between target groups, the magnitude differs slightly. In general, government respondents seem to be more concerned about the issues being aggravated by the pandemic, compared with the other groups.

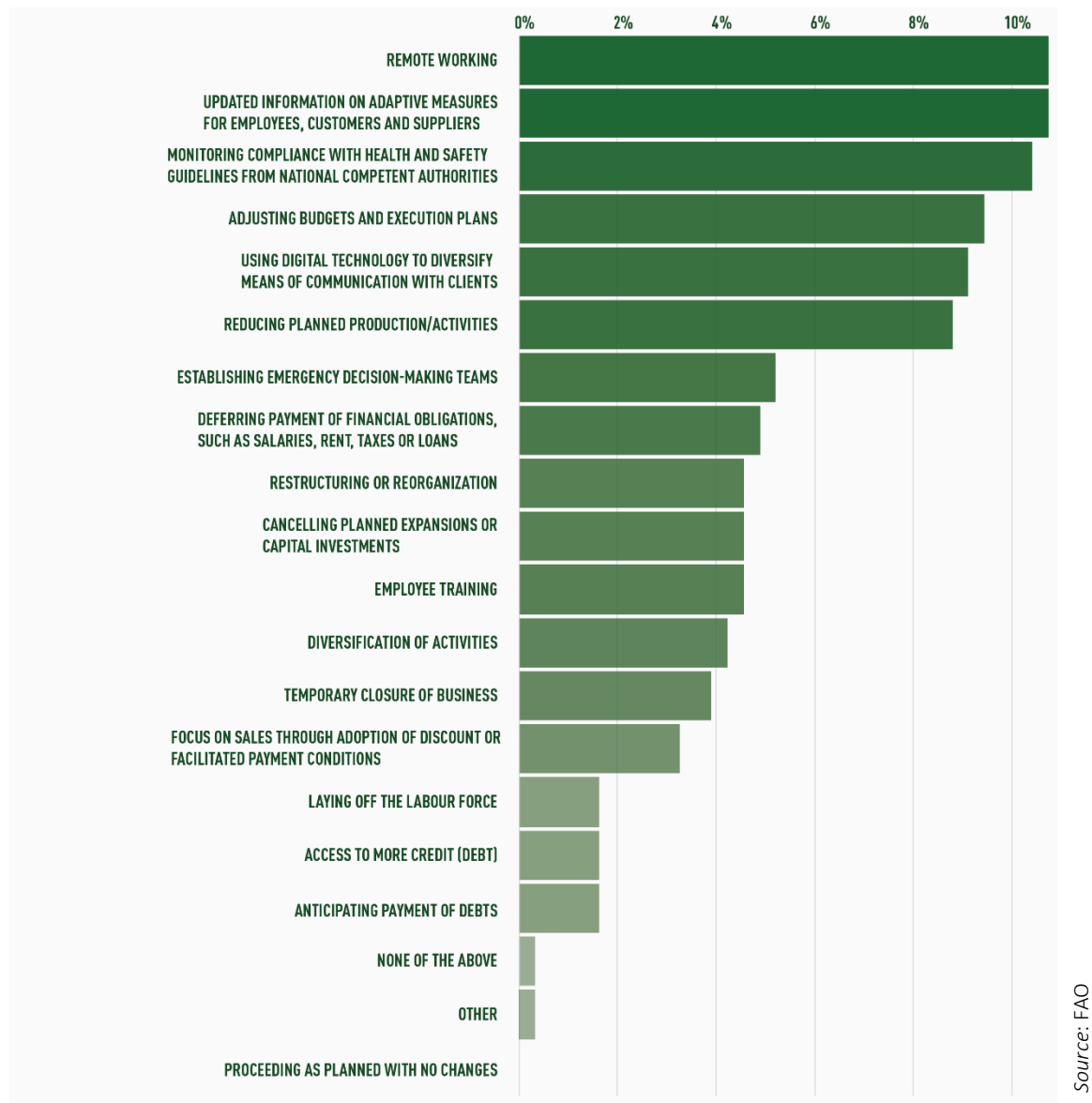
The open-ended responses indicated that disruptions to employment (the third most significant impact already experienced by businesses), and the return of the urban population to rural areas, are expected to put increasing pressure on forest resources through illegal charcoal production, conversion of forests to agriculture and other unplanned activities where legal livelihoods are lost. These open responses emphasized the need to urgently address these issues and hinted at the importance of supportive measures to protect rural livelihoods while reducing pressure on the environment.

Immediate response measures adopted by businesses

All private-sector respondents and FFPOs reported changes in their businesses to face the immediate impacts of the pandemic. A fairly equal distribution of responses across categories

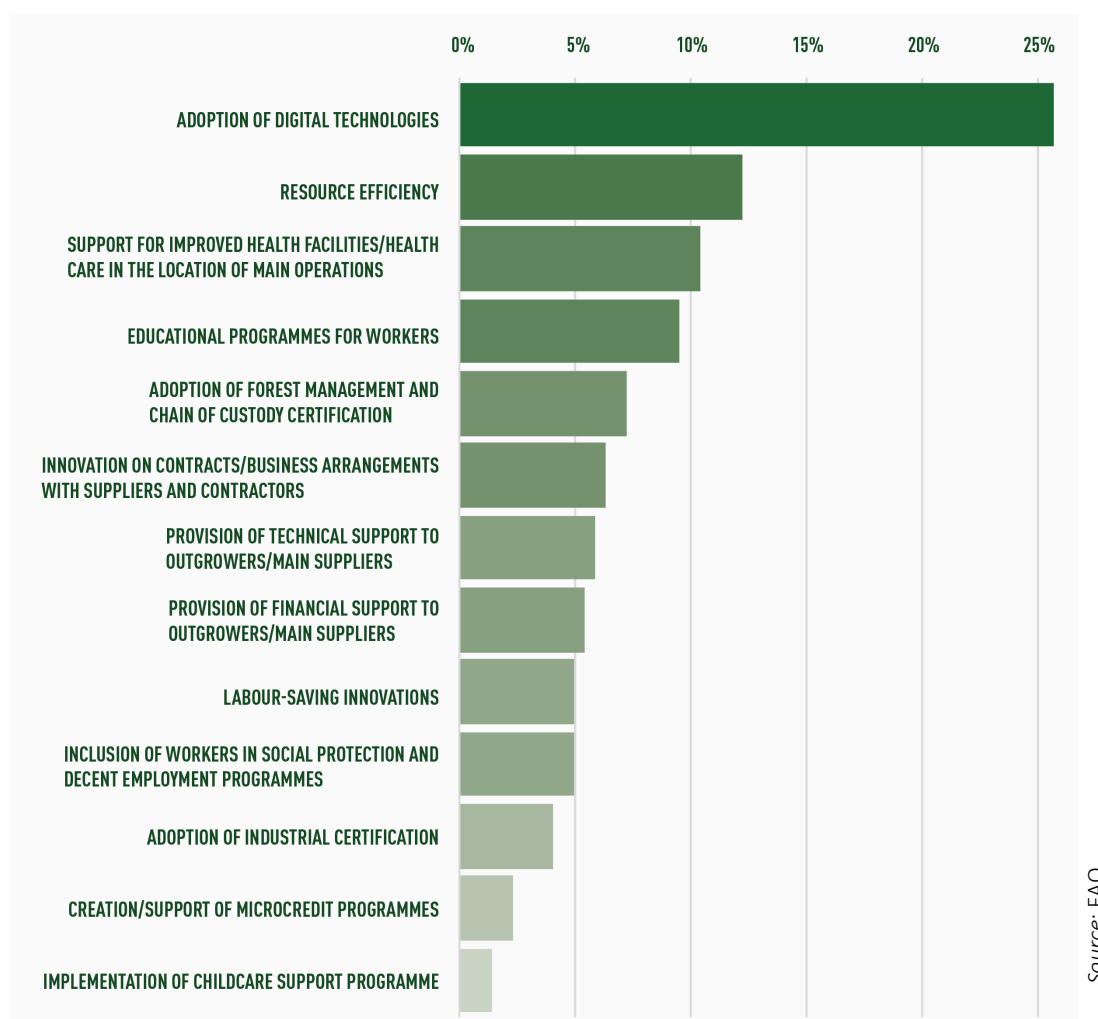
and the selection of almost all answer choices provided by the survey suggest multiple initial approaches to the emerging crisis. Results show that forest subsectors opted for remote working as the most-adopted short-term measure (11 percent), together with updated information on adaptive measures for employees, customers and suppliers (11 percent). Results also suggest that the COVID-19 pandemic may have improved health standards along wood value chains, as monitoring compliance with health and safety guidelines from own authorities was the third highest-ranked (10 percent) strategy adopted by businesses (Figure 5).

FIGURE 5 | Percentage of immediate response measures adopted by businesses



Laying off the labour force was one of the last measures to be adopted by businesses (2 percent out of the total 46 business responses). Conversely, the private sector and FFPOs seemed supportive of investments in labour quality, as almost 10 percent of respondents were considering educational programmes as a medium- to long-term strategy in the recovery phase (Figure 6).

FIGURE 6 | Percentage of medium- to long-term strategies considered by businesses



Medium- and long-term strategies considered by businesses to promote recovery

In moving forward, the forest sector is actively considering digitalization to promote recovery, see Figure 6. Consideration of medium- to long-term measures in the recovery phase significantly differed across subsectors. The main measure considered by the logging and solid wood subsector was primarily the adoption of industrial certification. Discussions at international workshops² suggest that such plans might stem from the perception of an increased need to improve competitiveness and participate in supply chains less vulnerable to shocks, which tend to work with suppliers with better quality standards demonstrated through certification. Respondents from the logging segment also indicated microfinance and childcare support as important measures in the recovery phase, reflecting concerns typical of SMFEs and smallholder businesses. In contrast, solid wood businesses selected increased resource efficiency and labour-saving innovations as their most preferred measures to promote recovery. The providers of silvicultural activities were more focused on financial and technical support to outgrowers and other main suppliers, and the furniture subsector prioritized measures related to labour-saving innovations and the creation of microcredit programmes.

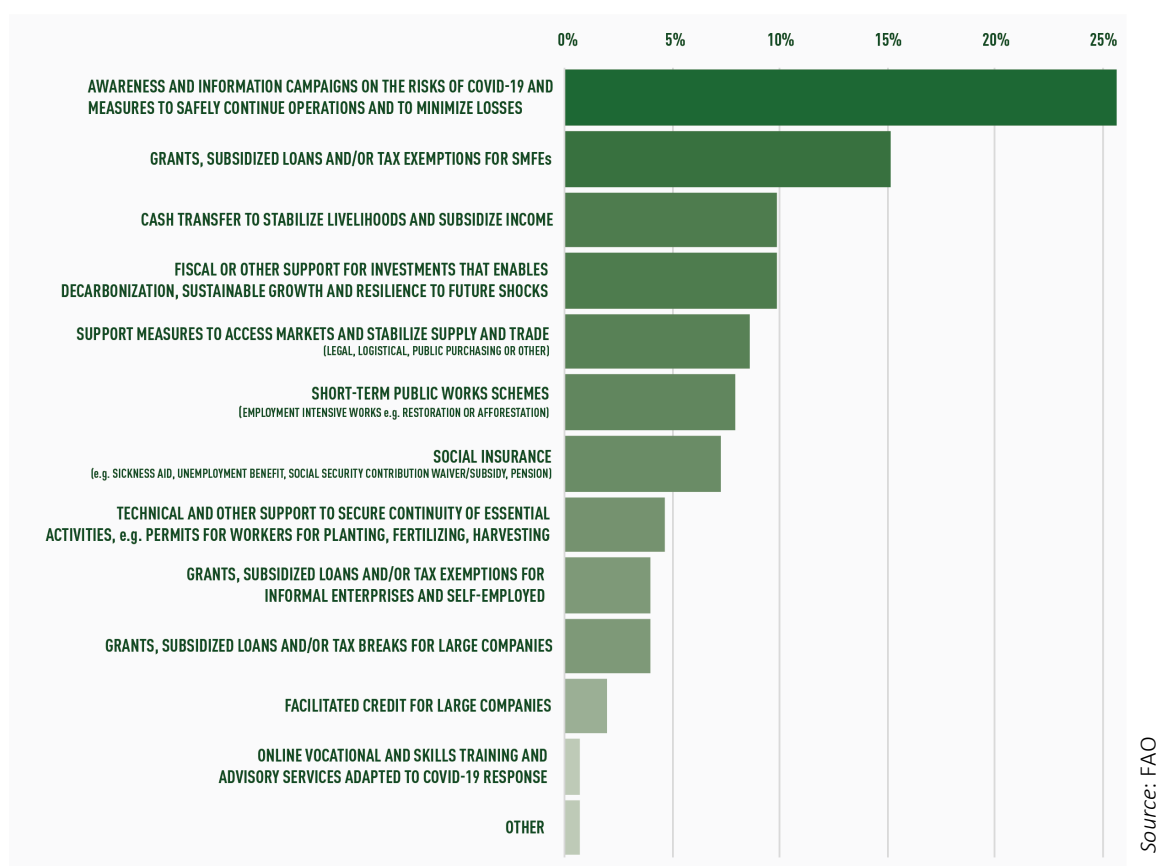
² Regional workshops in preparation for [FAO Forestry Paper 180](#) in Gabon, Indonesia and Peru in 2017 and the [SW4SW International Meeting](#) in Rome in 2017.

Government-led measures to support forest livelihoods

From the set of common questions to all respondents about government-led measures, the survey revealed that the main role governments are expected to play in supporting forest-dependent livelihoods is to promote awareness and information campaigns on the risks of COVID-19 and measures to safely continue operations and to minimize losses, indicated by 26 percent of respondents (out of a total of 152 responses). Provision of grants, subsidized loans and/or tax exemptions for SMFEs was the second most-selected government-led measure (15 percent), see Figure 7.

The distribution of responses related to government-led measures varies across the different target groups. After awareness and information campaigns, private sector respondents believed that financial support targeting SMFEs would have the greatest impacts. At the same time, FFPOs were more supportive of cash transfer to stabilize livelihoods and subsidize income, as well as provision of financial support to informal enterprises and the self-employed. Governments also selected cash transfer to stabilize livelihoods and subsidize income as a significant measure. Development agencies, on the other hand, were more supportive of short-term public works schemes and social insurance.

FIGURE 7 | Percentage of government-led measures to support forest livelihoods

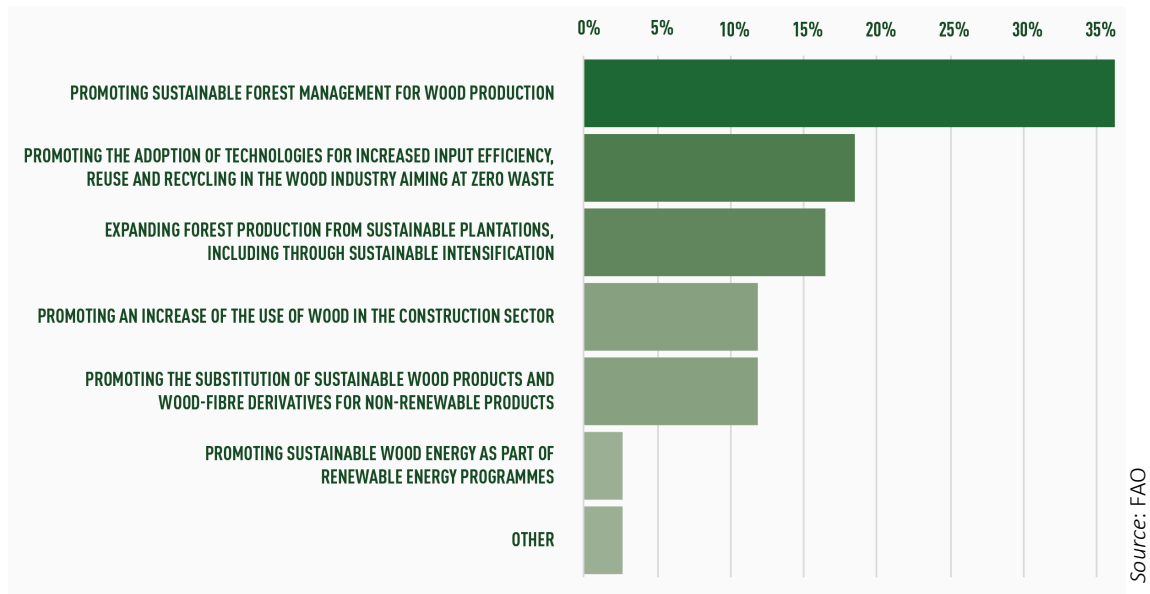


Most relevant measures to include the circular bioeconomy in post-COVID policies

From the set of common questions to all respondents about the most relevant measures to include in building back better strategies to move towards a circular bioeconomy and contribute to climate change mitigation, most of the respondents (35 percent out of a total of 152 responses) pointed to the promotion of SFM for wood production (Figure 8).

Responses were fairly equally distributed across the different target groups. In addition to the promotion of SFM for wood production, respondents from the private sector and development agencies were also supportive of forest production from sustainable plantations and the use of wood in the construction sector. The second most relevant measure selected by governments, international organizations and academia was the promotion and adoption of technologies for increased input efficiency, reuse and recycling aiming at zero waste.

FIGURE 8 | Share of wood products in building back better efforts towards a circular bioeconomy and climate change mitigation

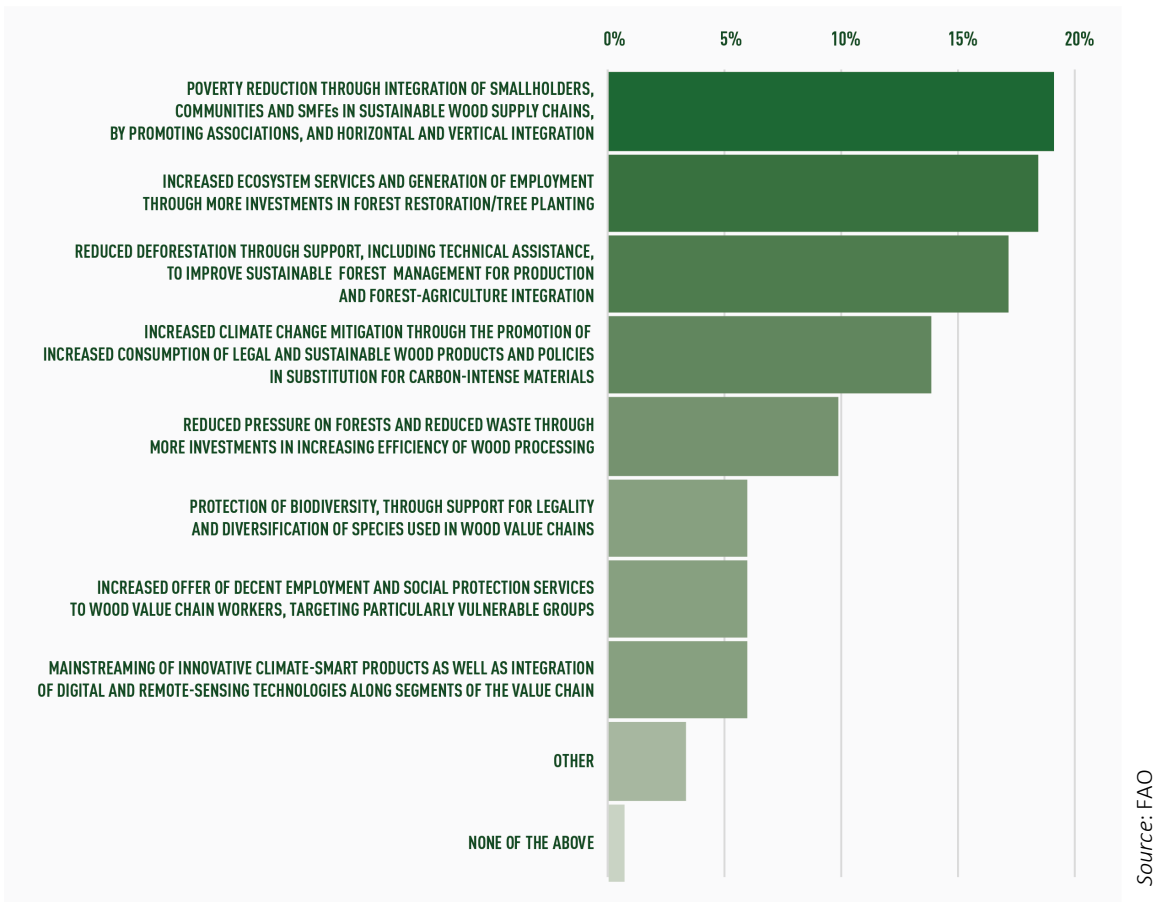


Contributions of wood value chains to building back better

The last multiple-choice question asked respondents to assess the most effective approach to “build back better” involving the forest sector. Results reveal that the COVID-19 crisis presents an opportunity to position forestry more forcefully as a sector that can effectively address poverty, generate income and employment and enhance resilience to shocks in rural areas. The integration of smallholders, communities and SMFEs in sustainable wood supply chains, including horizontal and vertical integration, was considered by 19 percent of respondents (out of a total of 152 responses) as the most effective approach, followed closely by the generation of employment through investments in forest restoration/tree planting (18 percent), see Figure 9.

Looking at the responses from different target groups, the second most effective approach considered by the private sector and development agencies was the promotion of increased consumption of legal and sustainable wood products and policies in substitution for carbon-intensive materials. FFPOs were strongly supportive of poverty reduction through the promotion of associations and integration of smallholders, communities and SMFEs in sustainable wood chains, as well as of more investment in forest restoration. International organizations and academia prioritized reducing deforestation to improve SFM and transform food systems through forest-agriculture integration, whereas government responses were evenly distributed across the other approaches.

FIGURE 9 | Percentage of effective approaches involving the forest sector to “build back better”



WAY FORWARD: POLICY RECOMMENDATIONS

The survey results indicate that wood value chains were hard hit by the COVID-19 pandemic, but the direction and intensity of impact were not homogeneous, with one sector (pulp and paper) reporting a positive impact. Although it is too soon to assess the long-term impact of response measures, the wood sector may emerge from the crisis with higher social and operational standards and social measures; and head towards digitalization, in response to the disruption that operations, workforce and finance have faced to date. Targeted policies in these areas can obtain fast results, given the awareness of the stakeholders. At the same time, participants demonstrably perceived a positive outlook to wood value chains, highlighting the crucial role that the forest sector can play from the perspective of both poverty reduction and sustainable natural resources management in the post-COVID-19 environment.

The key findings from this global survey were first discussed with experts during the COVID-19 Forestry Week (June 2020). These discussions together with findings from other COVID-19 forestry-related work published until June 2020, supported the formulation of policy recommendations. The following list identifies policy recommendations to address particular vulnerabilities of wood value chains and to build on the opportunities emerging from the sector. Consideration of these targeted policies by countries should therefore be guided by what is feasible and tailored to the local contexts and particularities of their value chains.

- **Placing wood value chains in recovery measures and strategies to ensure that decades of advances towards sustainable development targets are not reversed as a result of the pandemic.** Governments must be more effective in extending social security schemes for forestry employees, reinforcing programmes of legality, addressing informality, monitoring and enforcement, and licensing.
- **Provisioning timely and clear official information, as well as promoting awareness campaigns, are critical to allow adequate planning and implementation of responses to external shocks.** Government-led awareness campaigns and systematic information on the development of emergency situations facilitate adoption of exceptional measures, organization both within the business environment and as a sector, and adjustment of business strategies. Such a governmental role is even more important for SMFEs and remote forest communities.
- **Recognizing the need to provide financial support to small and medium forest enterprises in the emergency phase,** as they are an important source of employment and have not chosen to make job cuts (only wages) in response to the crisis, as reported by the survey. Many businesses would require cash transfers and subsidies to stay afloat. At the same time, forestry businesses must advance the implementation of sustainable practices, certification schemes and, as far as possible, invest in innovation and digitization.
- **Building legitimate partnerships and triggering better organization, cooperation and coordination of forest value chains for poverty reduction.** The COVID-19 crisis is an opportunity to help stakeholders to organize and promote more inclusive, integrated, diversified and shock-resilient value chains. An effective approach indicated by the survey respondents in moving forward is the integration of smallholders, communities and SMFEs in sustainable supply chains.
- **Strengthening forest governance will be critical to containing the pandemic's impact and leverage contributions from the forest sector to the recovery phase.** The survey results confirmed that regular monitoring and enforcement are needed to prevent further spread of unsustainable practices and illegal activities.
- **Promoting the trade and consumption of legal and sustainable wood products.** There is strong agreement that the promotion of SFM for wood production also has a crucial role to play in recovery, especially considering efforts to promote a circular bioeconomy and climate change mitigation in the post-COVID-19 environment.
- **Moving from the emergency to the recovery phase will require financial assistance.** There is a general perception that COVID-19 will increase demand for financial support, in contrast to the tendency reported by the forest subsectors for these financial flows to decrease. It remains unclear how industries and sectors will be prioritized in the allocation of funding for COVID-19 response and building back better. Improved data on the number of jobs and level of economic activity that the forest sector generates could make the case for the sector to access international support and financing for targeted action in response to COVID-19.

REFERENCES

- Centre for People and Forests (RECOFTC). 2020. *Survey finds forest communities in Thailand face multiple hardships from COVID-19*. Bangkok. (also available at <https://www.recoftc.org/news/survey-finds-forest-communities-thailand-face-multiple-hardships-covid-19>).
- Confederation of Timber Industries (CTI). 2020. *Impact of COVID-19 on the timber supply chain*. London. (also available at <https://ttf.co.uk/wp-content/uploads/2020/05/CTI-Impact-of-COVID-19-on-the-timber-supply-chain-120520.pdf>).
- FAO. 2020a. *The impacts of COVID-19 on the forest sector: How to respond?* Rome. (also available at <http://www.fao.org/documents/card/en/c/ca8844en>).
- FAO. 2020b. *Global emergence of infectious diseases: links with wild meat consumption, ecosystem disruption, habitat degradation and biodiversity loss*. Rome. (also available at <http://www.fao.org/documents/card/en/c/ca9456en>).
- International Tropical Timber Organization (ITTO). 2020. *Impact of COVID-19 pandemic on tropical timber producers*. Yokohama, Japan. (also available at https://www.itto.int/top_stories/2020/05/08/survey_shines_light_on_covid_19_impacts_on_tropical_timber_sector/).

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